

**Notice of Allowability**

Application No.

09/810,447

Applicant(s)

NAKAGAWA, MASAKI

Examiner

Christopher O. Onuaku

Art Unit

2616

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ The drawings filed on 19 March 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892) ✓
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 3/19/01 ✓
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance ✓
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 1-11 are allowable over the prior art of record.
2. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, the invention relates to an apparatus for reproducing a coded picture data which is coded by using a predictive coding scheme, including a coded picture data reproducing apparatus which is able to repetitively reproduce pictures between across frames by designating any two frames.

The closest references Hyodo et al (US 6,021,250) teach a coded data control device for use in a digital video recorder-player which uses a read-only recording medium such as a CD-ROM and a rewritable recording medium such as an optical magnetic disk, and Toebe, VIII et al (US 5,959,690) teach the field of digital motion video, including a system and techniques for altering and decompressing digital motion video signals in a manner which allows efficient reverse play of the motion video as well as efficient, frame-level access and play of the motion video stream for creation of other special video effects.

However, Hyodo et al and Toebe, VIII et al fail to explicitly disclose a coded picture data reproducing apparatus for reproducing a coded picture data which is coded from a picture signal, where the apparatus comprises a decoder controller for controlling

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the decoder to decode the bi-directional predictive coded picture data corresponding to the frame which is reproduced between the frame corresponding to the interframe forward predictive coded picture data output from the memory and the frame corresponding to the intraframe coded picture data in the picture data group where the start-frame belongs by using the interframe forward predictive coded picture data and the intraframe coded picture data, further controlling to decode the picture data corresponding to the frames up to the end-frame, and wherein the pictures corresponding to the respective frames from the start-frame to the end-frame are repetitively reproduced.

Regarding claim 5, the invention relates to an apparatus for reproducing a coded picture data which is coded by using a predictive coding scheme, including a coded picture data reproducing apparatus which is able to repetitively reproduce pictures between across frames by designating any two frames.

The closest references Hyodo et al (US 6,021,250) teach a coded data control device for use in a digital video recorder-player which uses a read-only recording medium such as a CD-ROM and a rewritable recording medium such as an optical magnetic disk, and Toebe, VIII et al (US 5,959,690) teach the field of digital motion video, including a system and techniques for altering and decompressing digital motion video signals in a manner which allows efficient reverse play of the motion video as well as efficient, frame-level access and play of the motion video stream for creation of other special video effects.

However, Hyodo et al and Toebes, VIII et al fail to explicitly disclose a coded picture data reproducing apparatus for reproducing a coded picture data which is coded from a picture signal, where the apparatus comprises a decoder controller for controlling the decoder to decode picture data following the bi-directional predictive coded picture output from the memory up to the end-frame, and wherein the pictures corresponding to the respective frames from the start-frame to the end-frame are repetitively reproduced.

Regarding claim 8, the invention relates to an apparatus for reproducing a coded picture data which is coded by using a predictive coding scheme, including a coded picture data reproducing apparatus which is able to repetitively reproduce pictures between across frames by designating any two frames.

The closest references Hyodo et al (US 6,021,250) teach a coded data control device for use in a digital video recorder-player which uses a read-only recording medium such as a CD-ROM and a rewritable recording medium such as an optical magnetic disk, and Toebes, VIII et al (US 5,959,690) teach the field of digital motion video, including a system and techniques for altering and decompressing digital motion video signals in a manner which allows efficient reverse play of the motion video as well as efficient, frame-level access and play of the motion video stream for creation of other special video effects.

However, Hyodo et al and Toebes, VIII et al fail to explicitly disclose a coded picture data reproducing apparatus for reproducing a coded picture data which is coded from a picture signal, where the apparatus comprises a decoder controller for controlling

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the decoder to decode the bi-directional predictive coded picture data corresponding to the frame which is reproduced between the frame corresponding to the interframe forward predictive coded picture data output from the memory and the frame corresponding to the intraframe coded picture data in the picture data group where the start-frame belongs by using the interframe forward predictive coded picture data and the intraframe coded picture data, further controlling the decoder to decode the picture data up to the end-frame, and wherein the pictures corresponding to the respective frames from the start-frame to the end-frame are repetitively reproduced.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kodama (US 6,275,618) teaches an apparatus for and a method of processing images, and recording medium with which images subjected to the MPEG coding in the form of open GOP can be reproduced without changing image quality.

Hallberg (U 6,658,199) teaches a method for constructing trick play mode video displays from an MPEG-2 digital video transport stream using a digital video decoder.

Gordon et al (US 6,584,153) teach an interactive electronic program guide suitable for use in an interactive video information delivery system.


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher O. Onuaku whose telephone number is 571-272-7379. The examiner can normally be reached on M-F 8:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
COO  
5/14/05

  
James J. Groody  
Supervisory Patent Examiner  
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